

03374100 WHITE RIVER AT HAZLETON, IN--Continued

[(National Water-Quality Assessment Program), White River Basin, Miami River Basin Study Unit]

## WATER-QUALITY RECORDS

The data described in the following table were collected and analyzed as part of the National Water Quality Assessment Program (NAWQA) in the White River Basin, Miami River Basin (WHMI) study units. The objectives of the NAWQA program are to broadly characterize the water-quality of the Nation's streams and aquifers in relation to human and natural factors. This project is one of 42 river basin and aquifer assessment projects being implemented across the nation on a staggered timeline. During the second decade of sampling, 14 of these projects will be actively collecting data. The period of high-intensity data collection for the WHMI project is in water years 2001-2004.

Water quality data from four stream sites in Indiana and two stream sites in Ohio are being reported as part of the NAWQA study: Big Walnut Creek nr Roachdale, IN (03357330), Little Buck Creek nr Indianapolis, IN (03353637), Sugar Creek at Co. Rd. 400S at New Palestine, IN (394340085524601), White River at Hazleton, IN (03374100), Holes Creek at Huffman Park at Kettering, OH (393944084120700), Mad River at St. Paris Pike near Eagle City, OH (03267900). Additionally, continuous monitor data, water temperature, dissolved oxygen, specific conductance, and pH were collected for all sites except Sugar Creek at Co. Rd. 400S at New Palestine, IN (394340085524601), which were instead collected at Sugar Creek at New Palestine, IN (03361650).

These data can also be obtained electronically at <http://in.water.usgs.gov> or at <http://oh.water.usgs.gov>.

(---, no data; <, concentration or value reported is less than that indicated; E, estimated value;  
K, value is estimated from a non-ideal colony count; M, presence verified, not quantified).

## PH, WH, FIELD, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	8.3	---
2	---	---	---	---	---	---	---	---	---	---	8.2	---
3	---	---	---	---	---	---	---	---	---	---	8.3	---
4	---	---	---	---	---	---	---	---	---	---	8.2	---
5	---	---	---	---	---	---	---	---	---	---	8.0	---
6	---	---	---	---	---	---	---	---	---	---	8.2	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	8.3	---	---
13	---	---	---	---	---	---	---	---	---	8.4	---	---
14	---	---	---	---	---	---	---	---	---	8.4	---	---
15	---	---	---	---	---	---	---	---	---	8.4	---	---
16	---	---	---	---	---	---	---	---	---	8.4	---	---
17	---	---	---	---	---	---	---	---	---	8.3	---	---
18	---	---	---	---	---	---	---	---	---	8.3	---	---
19	---	---	---	---	---	---	---	---	---	8.3	---	---
20	---	---	---	---	---	---	---	---	---	8.3	---	---
21	---	---	---	---	---	---	---	---	---	8.2	---	---
22	---	---	---	---	---	---	---	---	---	8.1	---	---
23	---	---	---	---	---	---	---	---	---	8.1	---	---
24	---	---	---	---	---	---	---	---	---	8.2	---	---
25	---	---	---	---	---	---	---	---	---	8.2	---	---
26	---	---	---	---	---	---	---	---	---	8.1	---	---
27	---	---	---	---	---	---	---	---	---	8.3	---	---
28	---	---	---	---	---	---	---	---	---	8.4	---	---
29	---	---	---	---	---	---	---	---	---	8.3	---	---
30	---	---	---	---	---	---	---	---	---	8.3	---	---
31	---	---	---	---	---	---	---	---	---	8.3	---	---

## WABASH RIVER BASIN

03374100 WHITE RIVER AT HAZLETON, IN--Continued

## OXYGEN DISSOLVED, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	11.9	---
2	---	---	---	---	---	---	---	---	---	---	9.4	---
3	---	---	---	---	---	---	---	---	---	---	7.4	---
4	---	---	---	---	---	---	---	---	---	---	7.0	---
5	---	---	---	---	---	---	---	---	---	---	7.1	---
6	---	---	---	---	---	---	---	---	---	---	7.3	---
7	---	---	---	---	---	---	---	---	---	---	8.1	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	8.4	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	11.3	---	---
20	---	---	---	---	---	---	---	---	---	12.0	---	---
21	---	---	---	---	---	---	---	---	---	12.2	---	---
22	---	---	---	---	---	---	---	---	---	12.0	---	---
23	---	---	---	---	---	---	---	---	---	9.9	---	---
24	---	---	---	---	---	---	---	---	---	9.7	---	---
25	---	---	---	---	---	---	---	---	---	9.7	---	---
26	---	---	---	---	---	---	---	---	---	8.1	---	---
27	---	---	---	---	---	---	---	---	---	7.9	---	---
28	---	---	---	---	---	---	---	---	---	8.6	---	---
29	---	---	---	---	---	---	---	---	---	9.6	---	---
30	---	---	---	---	---	---	---	---	---	10.7	---	---
31	---	---	---	---	---	---	---	---	---	12.1	---	---

## WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	31.7	---
2	---	---	---	---	---	---	---	---	---	---	31.8	---
3	---	---	---	---	---	---	---	---	---	---	31.9	---
4	---	---	---	---	---	---	---	---	---	---	32.4	---
5	---	---	---	---	---	---	---	---	---	---	32.5	---
6	---	---	---	---	---	---	---	---	---	---	23.7	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	28.0	---	---
13	---	---	---	---	---	---	---	---	---	27.4	25.1	---
14	---	---	---	---	---	---	---	---	---	27.1	24.8	---
15	---	---	---	---	---	---	---	---	---	27.7	---	---
16	---	---	---	---	---	---	---	---	---	28.4	---	---
17	---	---	---	---	---	---	---	---	---	28.9	---	---
18	---	---	---	---	---	---	---	---	---	28.8	---	---
19	---	---	---	---	---	---	---	---	---	28.9	---	---
20	---	---	---	---	---	---	---	---	---	29.6	---	---
21	---	---	---	---	---	---	---	---	---	30.8	---	---
22	---	---	---	---	---	---	---	---	---	31.5	---	---
23	---	---	---	---	---	---	---	---	---	30.9	---	---
24	---	---	---	---	---	---	---	---	---	30.6	---	---
25	---	---	---	---	---	---	---	---	---	30.2	---	---
26	---	---	---	---	---	---	---	---	---	29.8	---	---
27	---	---	---	---	---	---	---	---	---	30.0	---	---
28	---	---	---	---	---	---	---	---	---	30.4	---	---
29	---	---	---	---	---	---	---	---	---	30.8	---	---
30	---	---	---	---	---	---	---	---	---	30.9	---	---
31	---	---	---	---	---	---	---	---	---	31.3	---	---













03374100 WHITE RIVER AT HAZLETON, IN--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SI-M (UG/L) (04035)	SULFO-MET- REC (UG/L) (50337)	TEBU-RURON (UG/L) (82670)	THIURON (UG/L) (04032)	TER-BACIL (UG/L) (82665)	TER-BUFOS (UG/L) (82675)	THIO-BENCARB (UG/L) (82681)	TRIAL-LATE (UG/L) (82678)	TRI-BENURON (UG/L) (61159)	TRI-CLOPYR, FLTRD, REC (UG/L) (49235)	TRI-FLUR, ALIN REC (UG/L) (82661)	UREA 3(4-CHLOR OPHENYL METHYL REC (UG/L) (61692)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT													
04...	.017	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.009	<.02	<.009	<.02	92
18...	.248	<.009	E.003	<.010	<.034	<.02	<.005	<.002	<.009	.03	<.009	<.02	91
NOV													
15...	.167	<.009	<.002	<.010	<.034	<.02	<.005	<.002	<.009	<.02	<.009	<.02	94
28...	2.95	<.009	<.006	<.010	<.034	<.02	<.005	<.002	--	<.02	<.009	<.02	92
DEC													
12...	.273	<.009	<.02	<.010	<.034	<.02	<.005	<.002	--	<.02	<.009	<.02	43
JAN													
09...	.134	<.009	<.02	<.010	<.034	<.02	<.005	<.002	--	<.02	<.009	<.02	94
FEB													
06...	.358	<.009	E.01	<.010	<.034	<.02	<.005	<.002	--	<.02	<.009	<.02	97
MAR													
06...	.137	<.009	<.02	<.010	<.034	<.02	<.005	<.002	--	<.02	<.009	<.02	93
APR													
04...	.090	<.009	E.01	<.010	<.034	<.02	<.005	<.002	--	<.02	<.009	<.02	93
MAY													
09...	.309	<.009	<.02	<.010	<.034	<.02	<.005	<.002	--	.03	<.009	<.02	99
16...	.331	<.009	<.02	<.010	<.034	<.02	<.005	<.002	--	<.02	<.009	<.02	98
30...	.329	--	<.02	--	<.034	<.02	<.005	<.002	--	--	<.009	--	--
JUN													
06...	.559	<.009	<.02	<.010	<.034	<.02	<.005	<.002	--	<.02	<.009	<.02	81
13...	1.04	<.009	<.02	<.010	<.034	<.02	<.005	<.002	--	<.02	<.009	<.02	96
20...	.375	E.007	E.01	<.010	<.034	<.02	<.005	<.002	--	.04	<.009	<.02	90
27...	.225	<.009	<.02	<.010	<.034	<.02	<.005	<.002	--	.13	<.009	<.02	96
JUL													
11...	.232	<.009	E.01	<.010	<.034	<.02	<.005	<.002	--	<.02	<.009	<.02	96
18...	.099	--	<.02	--	<.034	<.02	<.005	<.002	--	--	<.009	--	--
25...	.057	--	<.02	--	<.034	<.02	<.005	<.002	--	--	<.009	--	--
AUG													
15...	.038	<.009	<.02	<.010	<.034	<.02	<.005	<.002	--	<.02	<.009	<.02	93
29...	.054	--	<.02	--	<.034	<.02	<.005	<.002	--	--	<.009	--	--
SEP													
12...	.033	<.009	<.02	<.010	<.034	<.02	<.005	<.002	--	<.02	<.009	<.02	87

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SEDI-MENT, SUS-PENDED (MG/L) (80154)
OCT	
04...	68
18...	252
NOV	
15...	61
28...	352
DEC	
12...	144
JAN	
09...	26
FEB	
06...	298
MAR	
06...	109
APR	
04...	79
MAY	
09...	85
16...	62
30...	--
JUN	
06...	172
13...	289
20...	134
27...	158
JUL	
11...	113
18...	--
25...	--
AUG	
15...	77
29...	--
SEP	
12...	38

03374455 PATOKA RIVER NEAR HARDINSBURG, IN

LOCATION.--Lat  $38^{\circ}26'41''$ , long  $86^{\circ}23'14''$ , in NW $_{1/4}$  SE $_{1/4}$  sec.10, T.1 S., R.1 E., Orange County, Hydrologic Unit 05120209, (VALEENE, IN quadrangle), on downstream edge of right pier of county road bridge, 0.3 mi downstream from Fudge Creek, 0.7 mi northeast of Valeene, 6.0 mi southwest of Hardinsburg, and at mile 158.0.

DRAINAGE AREA.--12.8 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and partial concrete control. Datum of gage is 606.89 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.66	e5.6	90	e9.6	394	e15	21	31	3.0	1.7	0.15	0.01
2	0.60	e5.2	44	e8.5	95	47	18	31	2.8	e1.4	0.11	0.01
3	0.67	e4.6	30	e7.6	52	124	16	30	2.8	e1.2	0.09	0.0
4	0.91	e4.0	22	e7.2	34	47	14	21	2.3	e1.1	0.06	0.00
5	2.5	e3.6	17	e6.8	24	32	12	16	88	e1.0	0.05	0.00
6	4.8	e3.3	67	e7.4	21	25	e11	87	134	e0.90	0.04	0.00
7	e2.3	e3.1	69	e6.8	18	20	10	114	40	e0.84	0.03	0.00
8	e0.94	e3.0	49	e6.6	15	17	10	533	16	e0.78	0.01	0.00
9	e1.0	e3.0	36	e7.2	13	61	26	134	9.6	e0.74	0.0	0.00
10	e1.1	e2.8	25	e9.0	12	57	19	58	6.7	e1.1	0.00	0.00
11	e1.2	e2.7	19	e9.0	10	34	16	34	5.3	e0.96	0.00	0.00
12	e6.8	e2.5	19	e8.2	9.7	29	14	84	5.1	e0.82	0.00	0.00
13	e5.0	e2.4	82	e7.7	8.6	25	378	908	7.8	e0.70	0.00	0.00
14	e120	e2.3	115	e7.4	7.7	20	745	169	8.4	e0.70	0.01	0.00
15	29	e2.3	67	e7.1	7.6	18	159	67	4.9	e0.68	0.05	0.00
16	10	e2.2	340	6.8	7.1	187	70	38	3.8	e0.60	0.04	0.00
17	4.9	e2.1	1120	6.7	6.6	72	43	28	3.1	e0.54	0.04	0.00
18	3.0	e2.0	236	6.2	6.0	43	31	27	2.5	e0.50	0.08	0.00
19	2.4	e2.3	103	6.3	5.9	119	25	19	2.2	e0.50	0.15	0.00
20	2.2	e2.6	56	6.0	17	268	22	15	e1.9	e0.47	0.11	0.0
21	2.2	e2.3	38	5.9	27	104	116	12	e1.7	e0.44	0.09	0.01
22	2.8	e2.2	31	6.0	e10	51	163	10	e1.5	0.41	0.07	0.00
23	108	e2.1	116	6.5	e9.0	36	59	8.7	e1.3	0.37	0.07	0.00
24	302	e5.0	63	184	e8.0	28	38	7.6	e5.0	0.32	0.08	0.00
25	144	e19	40	75	e7.6	28	33	6.6	31	0.27	0.06	0.00
26	50	e5.8	31	39	e35	201	24	5.8	15	0.19	0.05	0.00
27	e21	41	25	28	e21	87	56	5.0	6.2	0.18	0.05	23
28	e13	300	21	22	e17	49	260	4.6	4.9	0.16	0.04	1.5
29	e10	510	18	18	---	37	79	4.3	3.6	0.13	0.03	0.80
30	e7.4	277	14	98	---	33	42	3.9	2.4	0.19	0.03	0.70
31	e6.2	---	e11	122	---	26	---	3.3	---	0.19	0.02	---
TOTAL	866.58	1226.0	3014	752.5	898.8	1940	2530	2515.8	422.8	20.08	1.61	26.03
MEAN	27.95	40.87	97.23	24.27	32.10	62.58	84.33	81.15	14.09	0.648	0.052	0.868
MAX	302	510	1120	184	394	268	745	908	134	1.7	0.15	23
MIN	0.60	2.0	11	5.9	5.9	15	10	3.3	1.3	0.13	0.00	0.00
CFSM	2.18	3.19	7.60	1.90	2.51	4.89	6.59	6.34	1.10	0.05	0.00	0.07
IN.	2.52	3.56	8.76	2.19	2.61	5.64	7.35	7.31	1.23	0.06	0.00	0.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2002, BY WATER YEAR (WY)

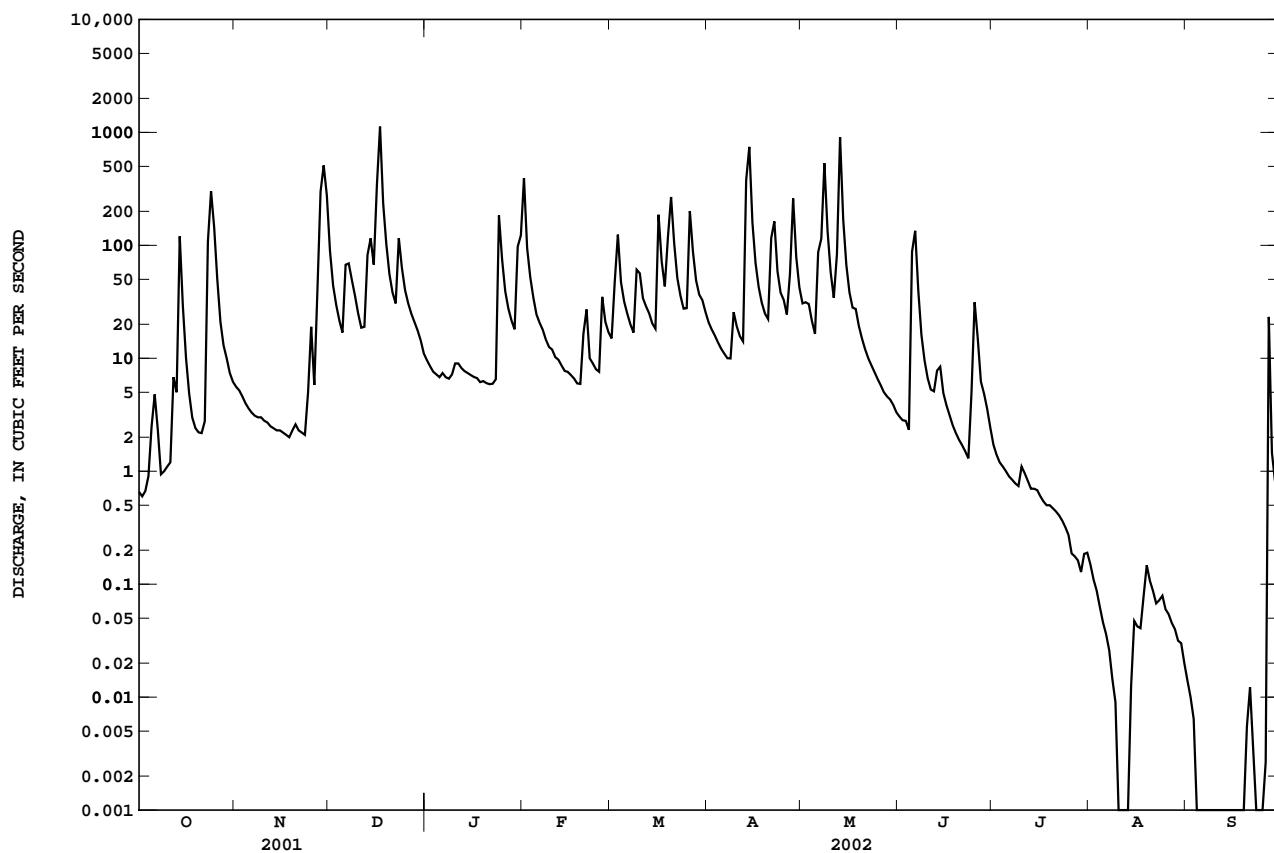
MEAN	3.695	18.41	32.73	34.12	39.74	49.62	50.38	38.20	18.68	9.200	5.369	3.900
MAX	28.0	77.3	109	107	89.6	134	133	158	108	89.6	35.8	34.4
(WY)	2002	1980	1991	1982	1990	1997	1996	1996	1997	1979	1998	1996
MIN	0.000	0.000	1.17	0.61	2.58	8.80	6.79	2.47	0.46	0.26	0.000	0.000
(WY)	1998	2000	1981	1981	1992	1981	1976	2001	1988	1983	1991	1999

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1969 - 2002

ANNUAL TOTAL	8074.10	14214.20		
ANNUAL MEAN	22.12	38.94	25.26	
HIGHEST ANNUAL MEAN			47.3	1996
LOWEST ANNUAL MEAN			6.35	1992
HIGHEST DAILY MEAN	1120	Dec 17	1120	Dec 17
LOWEST DAILY MEAN	0.50	Sep 5	0.00	Aug 9
ANNUAL SEVEN-DAY MINIMUM	0.65	Jul 11	0.00	Sep 3
MAXIMUM PEAK FLOW			1990	Apr 14
MAXIMUM PEAK STAGE			8.31	Apr 14
ANNUAL RUNOFF (CFSM)	1.73	3.04	1.97	
ANNUAL RUNOFF (INCHES)	23.47	41.31	26.81	
10 PERCENT EXCEEDS	42	92	53	
50 PERCENT EXCEEDS	4.0	7.4	5.1	
90 PERCENT EXCEEDS	0.85	0.03	0.24	

e Estimated

03374455 PATOKA RIVER NEAR HARDINSBURG, IN--Continued



03374500 PATOKA RIVER NEAR CUZCO, IN

LOCATION.--Lat  $38^{\circ}26'31''$ , long  $86^{\circ}42'51''$ , in SW $\frac{1}{4}$ /SW $\frac{1}{4}$  sec.11, T.1 S., R.3 W., Dubois County, Hydrologic Unit 05120209 (CUZCO, IN quadrangle), on right bank 30 ft upstream from bridge on Cuzco Road South, 0.7 mi downstream from Patoka Lake, 2.3 mi south of Cuzco, 4.5 mi upstream from Dillon Creek, and at mile 117.8.

DRAINAGE AREA.--170 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1961 to September 2001 (discharge). October 2001 to September 2002 (stage only).

GAGE.--Water-stage recorder. Datum of gage is 477.00 ft above National Geodetic Vertical Datum of 1929, (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1961, nonrecording gage on downstream side of bridge, 1.7 mi downstream at same datum. Oct. 1, 1961 to Sept. 30, 1981, water-stage recorder at site described above. Prior to October 1979, published as "near Ellsworth".

REMARKS.--Flow regulated by U.S. Army Corps of Engineers from Patoka Lake since February 1978.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 10.63 ft, Jan. 20, 21, 2002, minimum gage height, 2.12 ft, June 20, 2002.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.1 ft according to information by local resident, discharge, 12,300 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 10.63 ft, Jan. 20, 21; minimum gage height, 2.12 ft, June 20.

GAGE HEIGHT, in FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.04	3.94	3.48	9.04	5.60	3.51	9.38	7.47	5.15	5.66	4.92	3.32
2	3.22	4.04	3.42	9.21	5.45	4.13	9.33	7.38	5.14	5.65	4.93	3.32
3	3.41	4.05	4.63	9.15	5.37	3.60	9.28	8.58	5.14	5.65	4.92	3.33
4	3.59	4.07	5.42	9.11	8.49	3.55	9.25	9.59	5.13	5.65	4.92	3.33
5	3.73	4.10	5.40	9.22	10.41	3.53	7.43	9.57	5.13	5.65	4.92	3.33
6	3.72	4.13	5.46	9.17	10.46	3.52	5.14	8.35	5.13	5.65	4.91	3.33
7	3.77	4.14	5.42	9.12	10.41	3.51	5.13	7.45	5.11	5.65	4.91	3.33
8	3.81	4.16	5.42	9.08	10.35	3.51	5.14	7.32	5.11	5.65	4.91	3.33
9	3.87	4.16	--	9.04	10.49	3.78	5.14	4.26	5.10	5.68	4.91	3.33
10	3.89	4.17	6.61	9.01	10.44	3.59	5.14	4.21	5.09	5.62	4.91	3.34
11	3.99	4.15	6.61	8.97	10.38	3.55	5.13	4.20	5.09	5.62	4.91	3.35
12	3.92	4.14	6.75	9.14	10.31	3.55	5.94	8.61	5.07	5.62	4.05	3.34
13	4.15	4.15	5.38	9.10	10.27	3.53	5.25	8.29	4.20	5.61	4.06	3.34
14	3.81	4.17	6.63	9.64	10.23	3.53	6.46	4.33	4.19	5.61	4.06	3.34
15	3.59	4.17	6.59	9.60	9.37	4.00	5.23	4.28	4.19	5.61	4.07	3.34
16	3.58	4.17	6.59	10.15	9.33	3.65	5.22	4.26	4.18	5.60	4.07	3.34
17	--	4.17	8.40	10.61	9.25	3.58	5.22	4.26	5.00	5.60	4.07	3.34
18	--	4.16	4.00	10.58	9.21	3.55	6.85	6.66	4.99	5.59	4.07	3.33
19	3.66	4.16	3.90	10.53	9.17	4.13	7.47	7.59	2.24	5.59	4.07	3.35
20	3.68	4.15	3.87	10.63	9.21	3.75	7.01	6.43	5.04	5.58	4.06	3.37
21	3.71	4.15	6.61	10.57	7.22	4.36	7.64	8.76	5.04	5.58	4.05	3.34
22	3.74	4.15	6.65	9.54	5.18	7.40	7.03	8.74	5.04	5.57	4.05	3.34
23	4.15	4.14	6.64	5.51	3.51	9.47	6.99	7.51	5.04	4.09	4.06	3.34
24	4.15	4.18	7.52	5.48	3.50	9.43	7.00	5.36	5.63	4.85	4.05	3.34
25	3.76	4.14	7.51	9.44	3.54	9.44	9.69	5.33	5.64	4.92	4.05	3.34
26	3.69	4.42	7.50	9.42	3.57	9.81	9.64	5.36	5.64	4.93	4.05	3.42
27	3.66	3.90	9.25	9.47	3.53	9.46	9.17	5.25	5.64	4.93	4.05	3.39
28	3.69	4.72	9.22	9.40	3.53	9.37	5.50	4.35	5.03	4.93	4.05	3.39
29	3.73	4.32	9.17	9.34	--	9.36	5.37	5.16	5.03	4.94	4.05	3.38
30	3.75	3.64	9.12	7.52	--	9.53	7.45	5.15	5.66	4.93	3.32	3.39
31	3.82	--	9.08	6.16	--	9.44	--	5.15	--	4.93	3.32	--
MEAN	--	4.14	--	9.10	7.78	5.49	6.85	6.43	4.96	5.39	4.31	3.35
MAX	--	4.72	--	10.63	10.49	9.81	9.69	9.59	5.66	5.68	4.93	3.42
MIN	--	3.64	--	5.48	3.50	3.51	5.13	4.20	2.24	4.09	3.32	3.32

03374500 Patoka River near Cuzco, IN--Continued

## WATER-QUALITY RECORDS

INSTRUMENTATION.--Temperature recorder.

PERIOD OF RECORD.--

WATER TEMPERATURE.--October 1987 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 32.6°C, July 31, 1999; minimum, 0.4°C, Jan. 18, 19, 1994, and Jan. 11, 1996.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 28.4°C, Aug. 6, minimum, 3.7°C, Jan. 20-22.

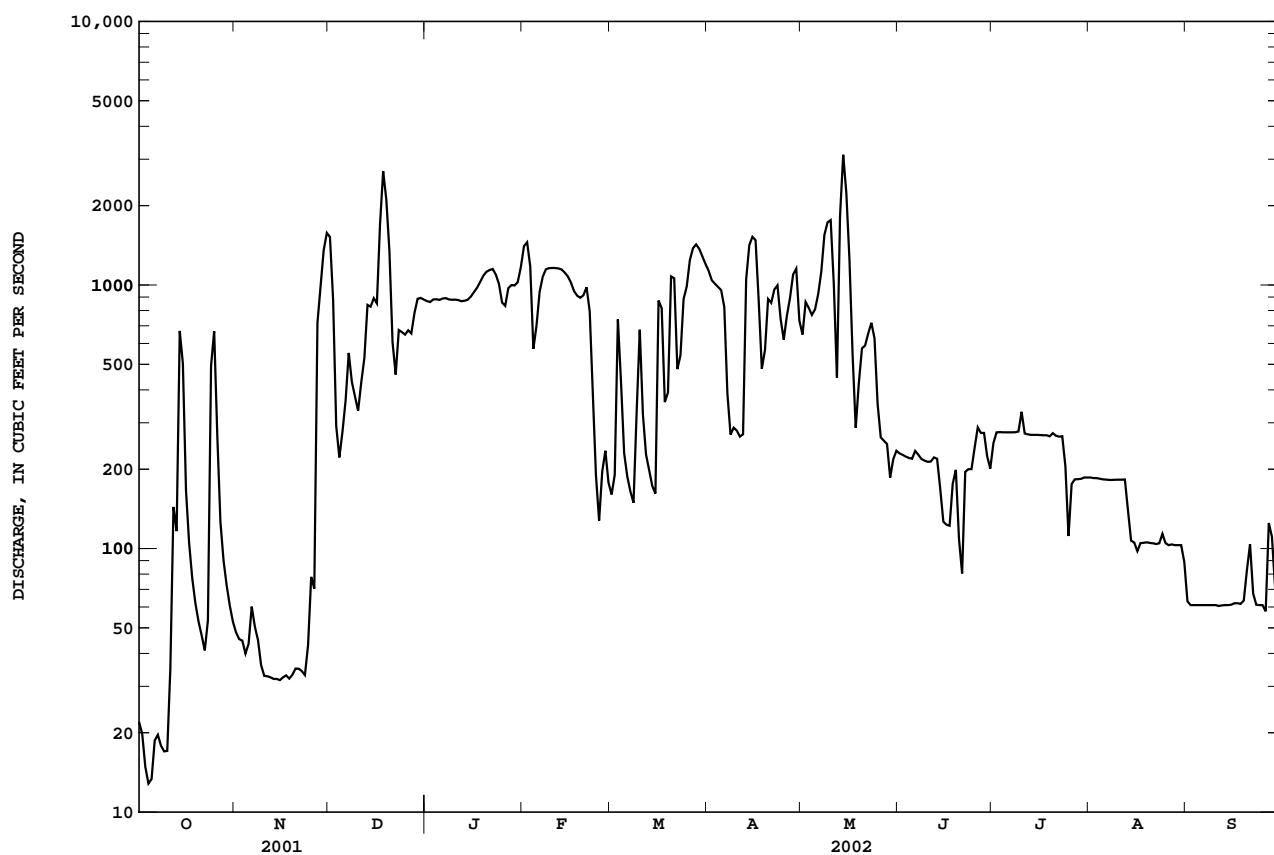
## WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.3	18.1	19.4	15.2	14.2	14.7	11.6	10.5	11.0	6.2	5.8	6.0
2	20.6	18.4	19.5	15.2	14.8	15.0	11.7	10.7	11.1	5.8	5.5	5.7
3	20.4	18.8	19.7	15.1	13.9	14.6	11.8	10.5	11.2	5.5	5.2	5.3
4	20.4	18.8	19.7	15.1	13.6	14.4	11.8	11.3	11.6	5.2	5.0	5.1
5	20.1	18.7	19.3	14.8	13.5	14.1	12.0	11.5	11.7	5.1	4.9	5.0
6	18.7	17.4	18.1	14.4	12.9	13.7	11.7	11.5	11.6	5.0	4.8	4.9
7	18.5	16.5	17.7	14.5	13.0	13.8	11.7	11.5	11.6	4.8	4.7	4.7
8	18.3	16.9	17.7	14.6	13.1	13.9	11.5	11.3	11.5	4.7	4.5	4.6
9	18.6	17.0	17.9	14.3	12.9	13.6	---	---	---	4.7	4.5	4.6
10	18.5	17.7	18.1	14.0	12.5	13.3	11.1	10.9	11.0	4.6	4.3	4.5
11	18.4	18.0	18.1	13.7	12.6	13.2	11.0	10.7	10.8	4.3	4.1	4.2
12	18.6	18.0	18.3	13.6	12.3	13.0	10.8	10.7	10.8	4.5	4.2	4.3
13	18.8	18.1	18.5	13.7	12.3	13.0	10.9	10.7	10.8	4.3	4.2	4.3
14	18.7	17.7	18.0	13.7	12.5	13.2	10.8	10.7	10.7	4.5	4.2	4.4
15	18.1	16.4	17.4	13.7	12.4	13.1	10.7	10.6	10.6	4.4	4.2	4.3
16	17.9	16.2	16.7	13.9	12.6	13.2	10.6	9.6	10.3	4.3	4.1	4.2
17	---	---	---	13.9	12.7	13.3	10.5	9.9	10.2	4.3	4.1	4.2
18	---	---	---	14.2	12.6	13.4	10.4	9.5	9.9	4.2	4.0	4.1
19	17.3	15.9	16.5	13.6	12.6	13.2	---	---	---	4.1	3.9	4.0
20	17.7	15.8	16.7	12.6	11.6	12.1	9.8	9.0	9.3	3.9	3.7	3.8
21	17.9	16.4	17.1	12.3	11.2	11.8	9.8	9.0	9.4	4.0	3.7	3.8
22	17.8	16.1	17.0	12.3	11.3	11.9	9.6	9.4	9.5	4.0	3.7	3.9
23	18.0	17.0	17.5	12.7	11.6	12.1	9.4	9.1	9.3	4.5	4.0	4.2
24	18.0	16.6	17.3	13.2	12.6	12.9	9.1	8.8	8.9	5.1	4.2	4.5
25	17.1	15.5	16.1	13.0	12.1	12.5	8.8	8.4	8.6	4.5	4.1	4.3
26	15.9	14.6	15.1	12.7	11.3	12.0	8.4	8.0	8.2	4.5	4.2	4.3
27	15.1	13.9	14.6	12.6	11.6	12.1	8.0	7.8	7.9	4.6	4.3	4.4
28	15.0	13.5	14.4	11.7	9.8	10.6	7.8	7.5	7.6	5.0	4.4	4.6
29	15.2	13.5	14.5	11.9	10.0	10.7	7.5	7.0	7.2	5.3	4.9	5.1
30	15.2	14.1	14.7	12.0	10.6	11.1	7.0	6.7	6.9	5.5	5.1	5.2
31	15.2	13.9	14.7	---	---	---	6.7	6.2	6.4	7.0	5.5	6.0
MONTH	---	---	---	15.2	9.8	13.0	---	---	---	7.0	3.7	4.6





03375500 PATOKA RIVER AT JASPER, IN--Continued



03375800 HALL CREEK NEAR ST. ANTHONY, IN

LOCATION.--Lat  $38^{\circ}21'45''$ , long  $86^{\circ}49'43''$ , in NW $_{1/4}$ NW $_{1/4}$  sec.11, T.2 S., R.4 W., Dubois County, Hydrologic Unit 05120209, (SAINT ANTHONY, IN quadrangle), on right bank 10 ft downstream of bridge on County Road 125 South, 0.7 mi upstream from Grassy Fork, 3.3 mi north of St. Anthony, and at mile 4.1.

DRAINAGE AREA.--21.8 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1970 to December 2001 (discontinued).

REVISED RECORDS.--WDR IN-75-1: 1971-74.

GAGE.--Water-stage recorder. Datum of gage is 456.22 ft above National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1997 at datum 3.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.23	11	73	---	---	---	---	---	---	---	---	---
2	0.22	9.7	44	---	---	---	---	---	---	---	---	---
3	0.22	8.3	30	---	---	---	---	---	---	---	---	---
4	0.20	7.3	22	---	---	---	---	---	---	---	---	---
5	0.51	6.5	16	---	---	---	---	---	---	---	---	---
6	4.3	5.7	91	---	---	---	---	---	---	---	---	---
7	1.7	5.3	58	---	---	---	---	---	---	---	---	---
8	0.83	4.8	54	---	---	---	---	---	---	---	---	---
9	0.54	4.2	36	---	---	---	---	---	---	---	---	---
10	0.51	4.1	26	---	---	---	---	---	---	---	---	---
11	6.4	3.8	19	---	---	---	---	---	---	---	---	---
12	39	3.4	79	---	---	---	---	---	---	---	---	---
13	17	3.3	114	---	---	---	---	---	---	---	---	---
14	225	3.3	153	---	---	---	---	---	---	---	---	---
15	38	3.1	67	---	---	---	---	---	---	---	---	---
16	26	2.9	471	---	---	---	---	---	---	---	---	---
17	19	2.7	1350	---	---	---	---	---	---	---	---	---
18	15	2.7	168	---	---	---	---	---	---	---	---	---
19	12	3.6	70	---	---	---	---	---	---	---	---	---
20	9.2	5.7	43	---	---	---	---	---	---	---	---	---
21	7.5	3.8	32	---	---	---	---	---	---	---	---	---
22	6.8	3.4	28	---	---	---	---	---	---	---	---	---
23	257	3.3	82	---	---	---	---	---	---	---	---	---
24	333	24	41	---	---	---	---	---	---	---	---	---
25	102	24	30	---	---	---	---	---	---	---	---	---
26	40	14	23	---	---	---	---	---	---	---	---	---
27	27	117	20	---	---	---	---	---	---	---	---	---
28	20	389	18	---	---	---	---	---	---	---	---	---
29	17	506	15	---	---	---	---	---	---	---	---	---
30	15	255	e11	---	---	---	---	---	---	---	---	---
31	13	---	e9.4	---	---	---	---	---	---	---	---	---
TOTAL	1254.16	1440.9	3293.4	---	---	---	---	---	---	---	---	---
MEAN	40.46	48.03	106.2	---	---	---	---	---	---	---	---	---
MAX	333	506	1350	---	---	---	---	---	---	---	---	---
MIN	0.20	2.7	9.4	---	---	---	---	---	---	---	---	---
CFSM	1.86	2.20	4.87	---	---	---	---	---	---	---	---	---
IN.	2.14	2.46	5.62	---	---	---	---	---	---	---	---	---

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2002, BY WATER YEAR (WY)

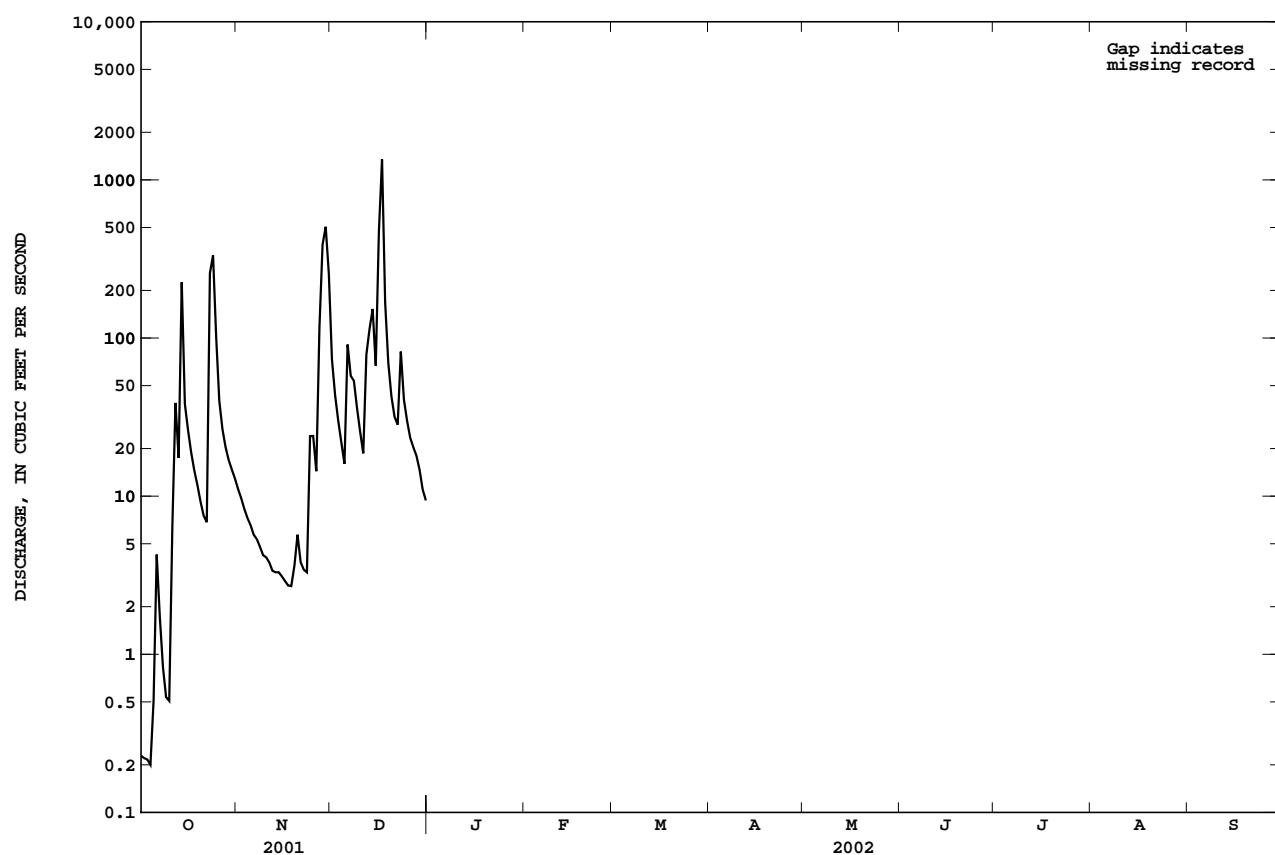
MEAN	8.573	31.65	41.58	40.78	55.00	57.54	52.81	34.02	22.07	19.26	11.17	10.30
MAX	40.5	147	125	154	131	131	142	153	73.7	247	52.5	68.0
(WY)	2002	1980	1991	1982	1985	1989	1972	1983	1979	1979	1979	1986
MIN	0.003	0.22	3.28	0.17	4.96	13.9	5.82	0.35	0.003	0.32	0.040	0.000
(WY)	1988	2000	1977	1977	1992	1981	2001	1988	1988	1983	1991	1999

## SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1971 - 2002

ANNUAL TOTAL	9423.91	5988.46	31.88
ANNUAL MEAN	25.82	65.09	78.4
HIGHEST ANNUAL MEAN			1979
LOWEST ANNUAL MEAN			11.5
HIGHEST DAILY MEAN	1350	Dec 17	1992
LOWEST DAILY MEAN	0.02	Aug 8	0.00
ANNUAL SEVEN-DAY MINIMUM	0.08	Aug 25	0.00
MAXIMUM PEAK FLOW		1860 Dec 17	11500 Jul 26 1979
MAXIMUM PEAK STAGE		14.37 Dec 17	15.30 Jul 26 1979
ANNUAL RUNOFF (CFSM)	1.18	2.99	1.46
ANNUAL RUNOFF (INCHES)	16.08	10.22	19.87
10 PERCENT EXCEEDS	45	164	61
50 PERCENT EXCEEDS	5.9	16	6.9
90 PERCENT EXCEEDS	0.31	2.0	0.27

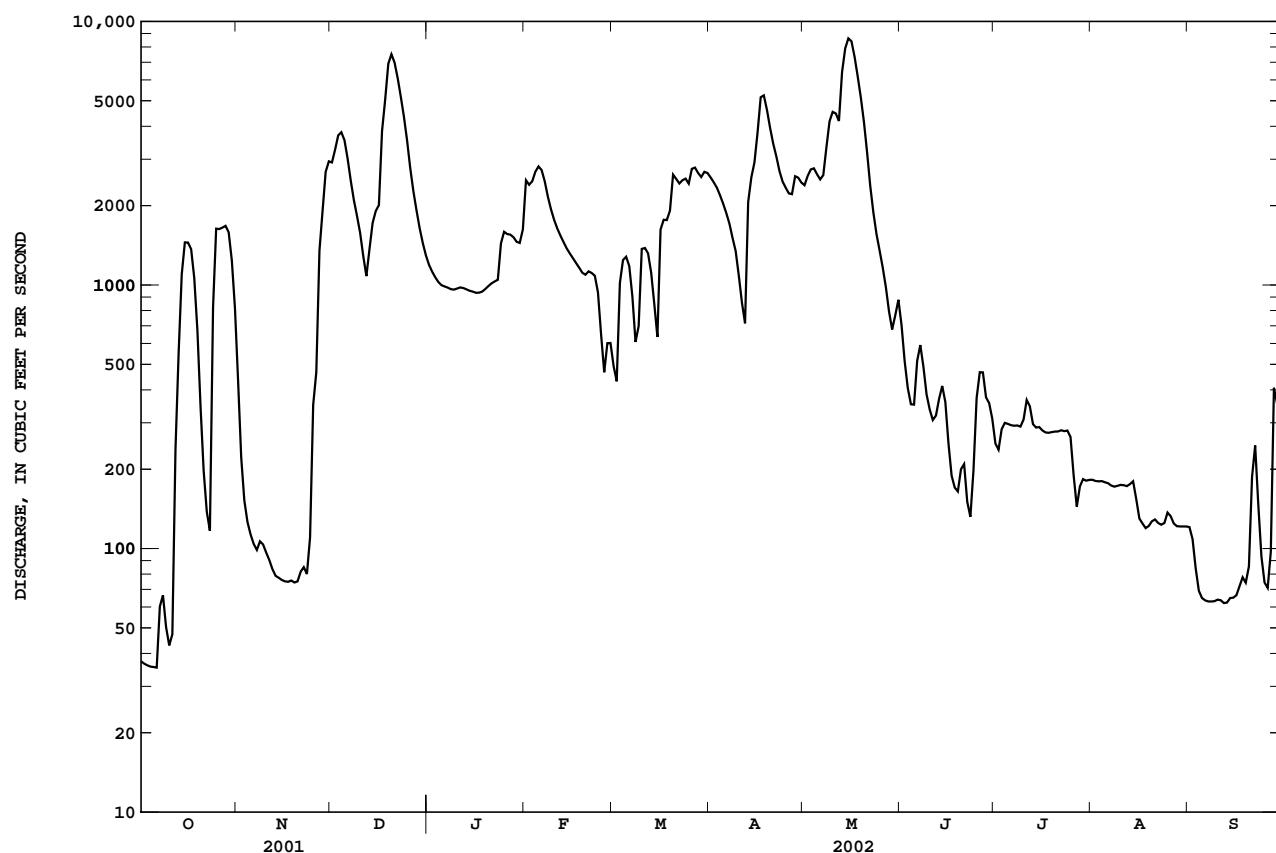
e Estimated

03375800 HALL CREEK NEAR ST. ANTHONY, IN--Continued



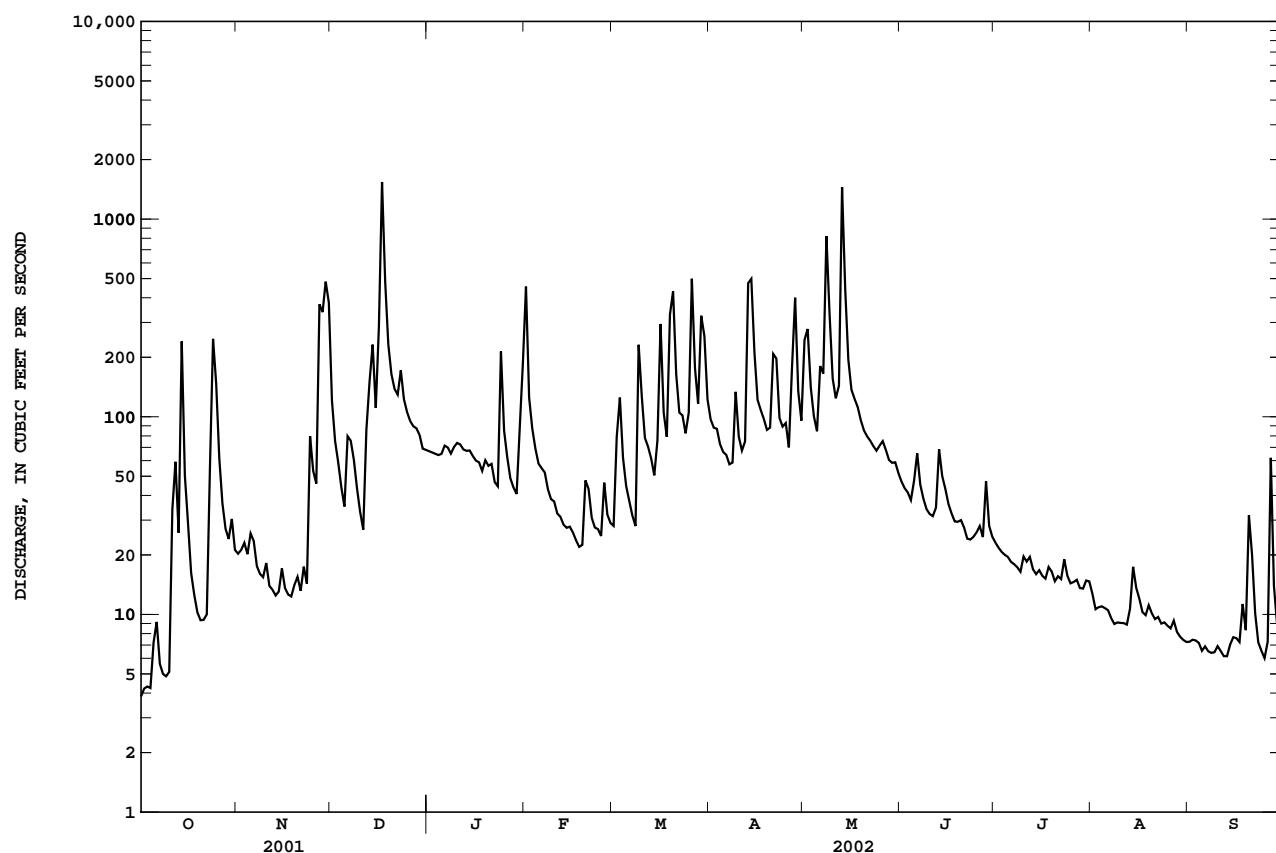


03376300 PATOKA RIVER AT WINSLOW, IN--Continued



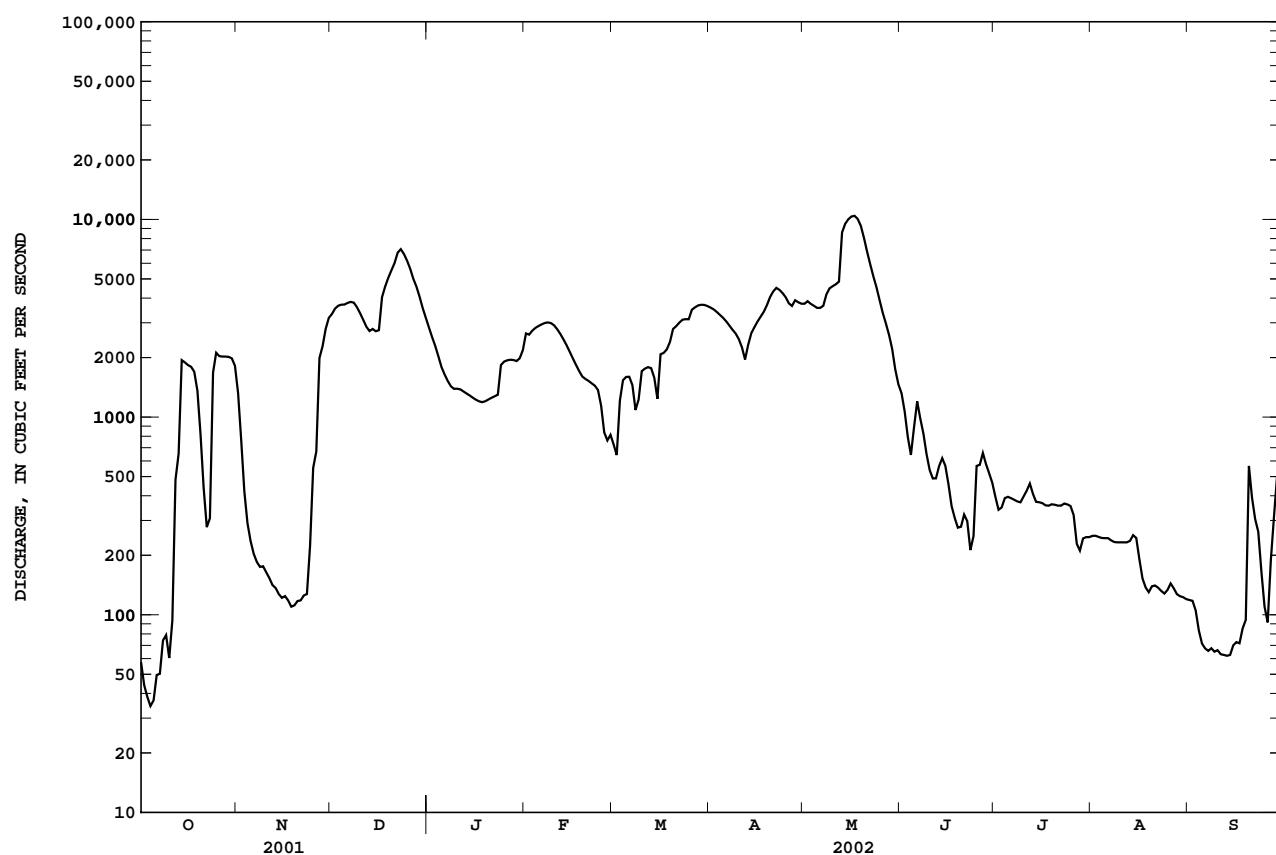


03376350 SOUTH FORK PATOKA RIVER NEAR SPURGEON, IN--Continued



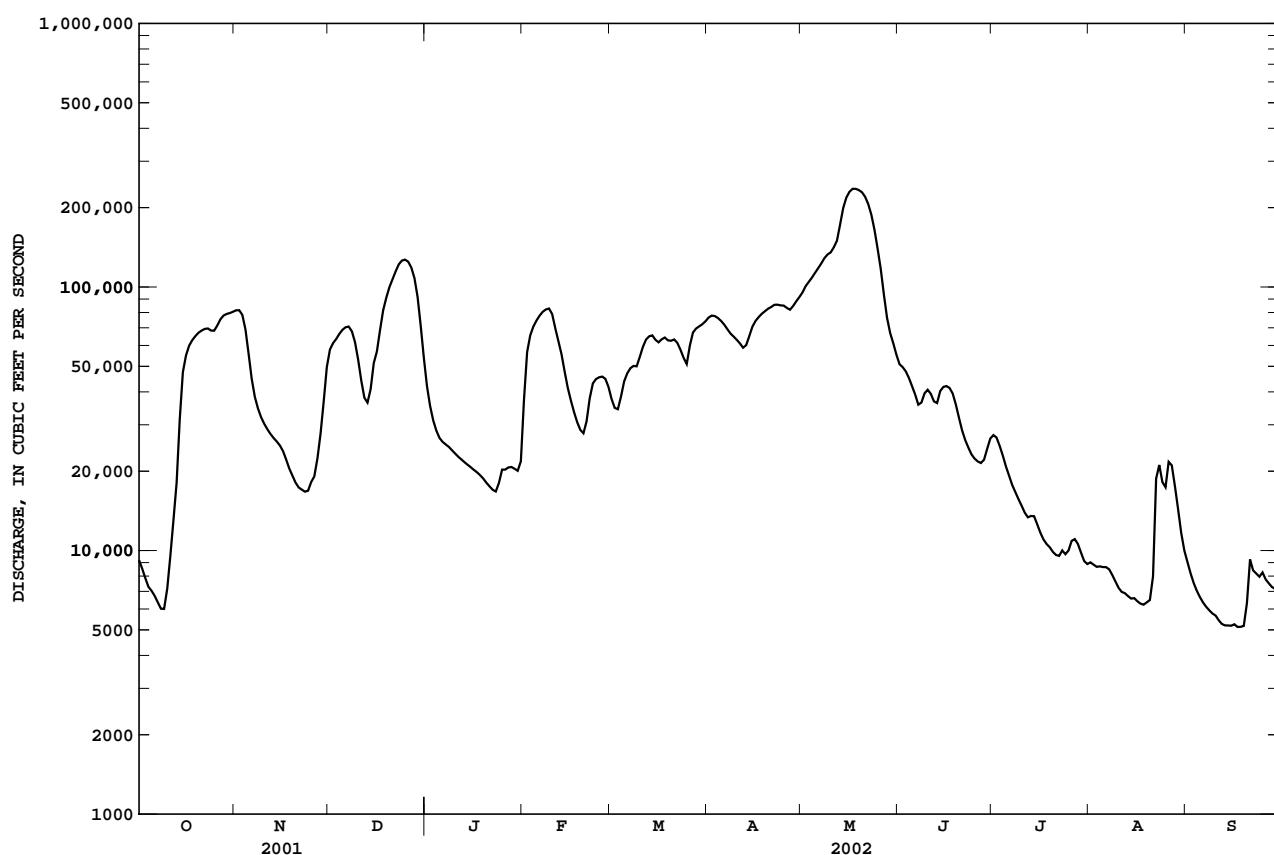


03376500 PATOKA RIVER NEAR PRINCETON, IN--Continued





03377500 WABASH RIVER AT MOUNT CARMEL, IL--Continued



## 03378500 WABASH RIVER AT NEW HARMONY, IN

LOCATION.--Lat  $38^{\circ}07'53''$ , long  $87^{\circ}56'32''$  in SE $^{1/4}$ SE $^{1/4}$  sec.35, T.4 S., R.14 W., Posey County, Hydrologic Unit 05120113, (NEW HARMONY, IN quadrangle), at bridge on State Highway 66 at New Harmony, at Indiana-Illinois state line, 2.3 mi downstream from (Wabash River including Black River, Hoggatt 1975), and at mile 53.1.

DRAINAGE AREA.--29,234 mi $^2$ .

## WATER STAGE RECORDS

PERIOD OF RECORD.--August 1988 to current year. Water discharge published October 1938 to September 1947.

GAGE.--Water-stage recorder. Datum of gage is 353.20 ft above National Geodetic Vertical Datum of 1929. (Prior to October 1992, erroneously published as 353.30 ft above National Geodetic Vertical Datum of 1929).

REMARKS.--Water-quality data collected (by USGS Kentucky district) October 1974 to 1986; 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 23.84 ft. May 26, 1943. Beginning August 1988, minimum gage height 0.46 ft. Oct. 12, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1913 reached a stage of 27.7 ft. Flood of Jan. 31, 1937, reached a stage of 24.4 ft.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 21.79 ft, May 18; minimum gage height, 1.17 ft, Sept. 15, 19, and 20.

GAGE HEIGHT, in FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.40	15.57	12.43	---	8.88	8.61	14.97	16.39	12.13	6.65	2.39	2.47
2	2.29	15.57	13.01	---	12.03	8.03	15.09	16.71	11.64	6.48	2.33	2.21
3	2.11	15.37	13.35	---	13.51	7.93	15.11	16.97	11.17	6.11	2.29	2.01
4	1.95	14.48	13.75	---	14.31	8.64	14.99	17.17	10.63	5.67	2.28	1.85
5	1.88	12.65	14.01	6.65	14.75	9.62	14.84	17.41	10.33	5.23	2.26	1.73
6	1.79	10.47	14.30	6.39	15.06	10.25	14.61	17.69	9.58	4.87	2.25	1.63
7	1.69	8.89	14.39	6.20	15.25	10.65	14.29	17.93	8.71	4.52	2.23	1.54
8	1.59	8.01	14.10	6.03	15.45	10.89	13.95	18.45	8.71	4.27	2.13	1.47
9	1.55	7.43	13.29	5.85	15.51	11.17	13.66	18.60	9.22	4.05	2.00	1.41
10	1.81	7.00	11.93	5.69	15.33	11.75	13.39	18.73	9.46	3.85	1.87	1.39
11	2.49	6.67	10.23	5.53	14.58	12.53	13.03	18.85	9.23	3.65	1.77	1.31
12	3.25	6.41	8.97	5.39	13.55	13.15	12.85	19.27	8.76	3.50	1.73	1.25
13	4.34	6.19	8.63	5.27	12.45	13.46	12.99	19.80	8.61	3.53	1.69	1.21
14	7.31	5.99	9.99	5.13	10.99	13.56	13.88	20.55	9.33	3.53	1.63	1.21
15	10.25	5.81	11.41	5.03	9.65	13.41	14.36	21.16	9.63	3.31	1.63	1.19
16	11.61	5.57	12.63	4.93	8.67	13.33	14.73	21.24	9.69	3.10	1.57	1.23
17	12.51	5.22	14.91	4.82	7.89	13.41	14.93	21.72	9.56	2.91	1.52	1.22
18	13.04	4.87	15.71	4.71	7.27	13.47	15.08	21.72	9.19	3.01	1.51	1.19
19	13.45	4.57	16.31	4.59	6.83	13.65	15.33	21.59	8.52	2.75	1.54	1.17
20	13.71	4.33	16.77	4.43	6.63	13.71	15.43	21.49	7.72	2.63	1.59	1.79
21	13.97	4.14	17.07	4.29	7.15	13.61	15.65	21.32	7.01	2.57	1.65	2.59
22	14.12	4.06	17.37	4.17	8.47	13.29	15.75	20.91	6.49	2.55	4.45	2.27
23	14.45	3.99	17.88	4.13	9.45	12.77	15.79	20.45	6.11	2.63	5.15	2.20
24	14.43	4.09	18.09	4.64	9.81	12.03	15.93	19.88	5.86	2.57	4.55	2.09
25	14.29	4.31	18.23	5.03	10.01	11.63	15.87	19.17	5.64	2.63	4.30	2.20
26	14.53	4.61	18.25	4.95	10.07	13.17	15.75	18.29	5.48	2.83	5.31	2.14
27	14.89	5.56	18.10	5.00	9.97	14.01	15.73	17.34	5.38	2.88	5.15	2.03
28	15.17	6.88	17.72	5.02	9.41	14.35	15.95	16.15	5.49	2.79	4.43	1.93
29	15.33	9.05	16.97	4.95	---	14.72	16.01	15.01	5.97	2.59	3.74	1.88
30	15.39	11.20	15.55	4.94	---	14.74	16.23	14.11	6.45	2.44	3.12	1.83
31	15.52	---	---	5.76	---	14.80	---	13.11	---	2.35	2.71	---
MEAN	8.81	7.63	---	---	11.18	12.27	14.87	18.68	8.39	3.63	2.67	1.72
MAX	15.52	15.57	---	---	15.51	14.80	16.23	21.72	12.13	6.65	5.31	2.59
MIN	1.55	3.99	---	---	6.63	7.93	12.85	13.11	5.38	2.35	1.51	1.17

## 03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

(National Stream-Quality Accounting Network station)

## WATER-QUALITY RECORDS

## PERIOD OF RECORD.--

CHEMICAL ANALYSES.--October 1974 to 1986. Data collected for water years 1997 and 1998 were published in the Kentucky Water Resources Data reports, and are stored in the Indiana NWIS/QW data base. October 1999 to current year.

SEDIMENT DISCHARGE.--Partial record station--October 1974 to 1985.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE.--October 1974 to September 1980.

WATER TEMPERATURES.--October 1974 to September 1980.

REMARKS.--Water discharge obtained from station Wabash River at Mount Carmel, IL. (03377500). Water quality data obtained from USGS Kentucky district office.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Sample type	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	UV TURBID- ITY LAB HACH 2100AN (NTU) (99872)	UV ABSORB- ANCE WTR FLT (UNITS /CM) (50624)	BARO- METRIC PRES- SURE (MM HG) (61726)	PH WATER WHOLE FIELD DIS- OF SOLVED (MG/L) (00025) (00300)	SPE- CIFIC (STAND- ARD UNITS) (US/CM) (00400)	TEMPER- ATURE DUCT- ANCE AIR WATER (DEG C) (00095) (00020) (00010)			
OCT 30...	1230	ENVIRONMENTAL	79600	41	.230	.177	767	7.8	7.4	402	21.0	11.0
DEC 11...	1240	ENVIRONMENTAL	43500	38	.137	.103	759	9.4	7.4	486	13.5	9.0
11...	1248	BLANK	--	--	<.004	<.004	--	--	--	--	--	--
JAN 29...	1300	ENVIRONMENTAL	20400	34	.076	.057	751	12.7	7.7	563	19.5	8.0
29...	1308	BLANK	--	--	--	--	--	--	--	--	--	--
FEB 12...	1220	ENVIRONMENTAL	62200	63	.138	.103	756	12.0	7.8	480	13.5	5.0
MAR 05...	1300	ENVIRONMENTAL	44200	77	.104	.078	761	13.3	7.9	551	11.0	3.5
05...	1310	REPLICATE	--	74	.102	.077	--	--	--	--	--	--
19...	1300	ENVIRONMENTAL	62400	140	.124	.093	753	10.5	7.8	454	11.5	9.0
APR 09...	1230	ENVIRONMENTAL	64800	52	.112	.083	757	11.0	7.6	481	19.0	10.5
23...	1300	ENVIRONMENTAL	85700	60	.157	.118	758	7.9	7.4	425	18.5	19.0
23...	1308	BLANK	--	--	--	--	--	--	--	--	--	--
MAY 06...	1330	ENVIRONMENTAL	120000	53	.150	.112	752	8.8	7.6	325	23.2	17.5
28...	1330	ENVIRONMENTAL	8000	48	.133	.098	752	7.3	7.5	455	25.0	21.0
28...	1340	REPLICATE	--	50	.134	.099	--	--	--	--	--	--
JUN 11...	1300	ENVIRONMENTAL	39300	260	.107	.080	751	7.0	7.9	484	30.0	24.5
11...	1308	BLANK	--	--	--	--	--	--	--	--	--	--
25...	1240	ENVIRONMENTAL	22300	67	.087	.065	--	8.7	8.1	553	--	27.5
JUL 16...	1310	ENVIRONMENTAL	11700	31	.086	.064	--	8.0	8.2	521	--	28.0
AUG 06...	1250	ENVIRONMENTAL	8650	37	.085	.063	--	7.8	8.3	538	--	28.0
06...	1300	REPLICATE	--	45	.086	.064	--	--	--	--	--	--
SEP 09...	1200	ENVIRONMENTAL	5770	18	--	--	--	7.5	8.0	575	--	28.0







## WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	THIO-	TRIAL-	TRI-	SED.	
	BENCARB	LATE	FLUR-	SIEVE	SEDI-
	WATER	WATER	ALIN	FLT	DIAM.
	0.7 U	0.7 U	0.7 U	% FINER	SUS-
GF, REC (UG/L) (82681)	GF, REC (UG/L) (82678)	GF, REC (UG/L) (82661)	.062 MM (70331)	PENDED (MG/L) (80154)	
OCT					
30...	<.005	<.002	<.009	87	119
DEC					
11...	<.005	<.002	<.009	90	85
11...	<.005	<.002	<.009	--	--
JAN					
29...	<.005	<.002	<.009	97	52
29...	--	--	--	--	--
FEB					
12...	--	--	--	86	81
MAR					
05...	<.005	<.002	<.009	95	126
05...	<.005	<.002	<.009	--	--
19...	<.005	<.002	<.009	96	209
APR					
09...	<.005	<.002	<.009	89	59
23...	<.005	<.002	<.009	92	93
23...	--	--	--	--	--
MAY					
06...	<.005	<.002	<.009	77	73
28...	<.005	<.002	<.009	89	71
28...	<.005	<.002	<.009	--	--
JUN					
11...	<.005	<.002	<.009	99	293
11...	<.005	<.002	<.009	--	--
25...	<.005	<.002	<.009	98	133
JUL					
16...	<.005	<.002	<.009	99	71
AUG					
06...	<.005	<.002	<.009	95	57
06...	<.005	<.002	<.009	--	--
SEP					
09...	<.005	<.002	<.009	99	24



03378550 BIG CREEK NEAR WADESVILLE, IN--Continued

